

*Peer and Partner Review: A Practical Approach to Achieving the Millennium Development Goals**

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Abstract A number of strategies to achieve the Millennium Development Goals (MDGs) and associated cost estimates have recently been presented, most influentially by the Millennium Project and the World Bank. The models underlying the recommended strategies are flawed, as a result of their reliance on implausible and restrictive assumptions and poor quality data and their failure adequately to reflect uncertainties about the future. These weaknesses of technocratic predictive models can be mitigated but not overcome. An alternative approach to strategic planning should establish an institutional framework for continuous informed policy choice by representative decision-makers. The alternative approach to achieving the MDGs can be implemented through a process of periodic peer and partner review. The process of peer and partner review would enable each country to learn from its own experience and that of other countries, and thereby increases the likelihood of success of achieving the MDGs.

Key words: Poverty, Development, Millennium Development Goals

Introduction

The Millennium Development Goals (MDGs) are time-bound quantified targets for improving the human condition, affirmed by heads of state in the United Nations Millennium Declaration (United Nations, 2000).¹ The Millennium Project (an advisory body to the United Nations Secretary-General directed by Professor Jeffrey Sachs) has recently published what it

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deems to be “a practical plan to achieve the Millennium Development Goals” (Millennium Project, 2005), and is preparing a number of country case studies to map out the major interventions and investments required to achieve the MDGs (taken together) in the countries concerned. To develop its “MDG needs assessment”, the Millennium Project sought the input of task forces of experts and of research institutions within countries. The Millennium Project has developed a list of interventions that can potentially promote the MDGs, and investment plans that aim to attain the MDGs through these interventions (Millennium Project, 2005, pp. 242–243). This report represents the most comprehensive and detailed strategy for achieving the MDGs. The World Bank and the United Nations Development Programme have also developed models for identifying the best strategy to achieve the goals.²

While the Millennium Project Report presents a forceful political message, whether its recommendations will really help to achieve a substantially and lastingly better world is questionable. A truly practical plan for achieving the MDGs must be based on the recognition that it is impossible to know in advance exactly how to achieve any goal, as is evinced by the dismal record of economies based on comprehensive central planning. We do know that some interventions (such as perhaps the use of insecticide dipped bed-nets to combat malaria advocated strongly by Professor Sachs and his colleagues) are likely to be very effective at enhancing human well-being. However, the solutions to a great many other problems are unknown.

Not enough is understood concerning the best measures to reduce deprivations. As a consequence, it is necessary to arrive at sound policies through learning. For example, consider the mid-day school meals introduced in southern Indian States in the early 1980s. This measure was initially criticized as populist and ineffective. Many economists feared that the program would add little to child nutrition, as poor parents would react to the availability of school meals by spending less of their private incomes on feeding children. Only a few analysts foresaw the real reason that these schemes would be an effective developmental tool: they encouraged parents to send their children to school in larger numbers than ever before. Learning from this success, the Government of India ultimately introduced subsidies for all states to implement such schemes, and the Indian Supreme Court mandated that they be implemented in every State. It is perhaps ironic that the Millennium Project identifies the wide introduction of school meals in developing countries as providing one of the ‘quick wins’ through which rapid gains in social development can be achieved.

Reddy and Heuty (2005) emphasize that existing approaches to identifying the best development strategies are unreliable. In particular, estimates of the costs and benefits of alternative strategies derive from implausible and restrictive assumptions, depend on poor-quality data, and do not adequately reflect uncertainties about the future. Technical fixes do

not exist for the most important problems we face. For these, institutional and political reforms, largely ignored in the Report, are as important.

A national development strategy must be made open to revision because of uncertainties about the opportunities and constraints that lie ahead. A country, like a person, does best by revising its plans in light of new information. National and international plans to achieve the MDGs must incorporate flexibility, so that they reflect the different conditions prevailing in different countries. However, allowing for flexibility is not in itself enough. A truly practical approach to achieving the MDGs must actively foster *learning* about the best strategies, rather than presuming that these strategies are known in advance. It is probable that new information will emerge over time about the best strategies. Policy-makers, like everyone, learn from the results of experiments at home and abroad. A practical approach to achieving the MDGs must enable and encourage countries to undertake experiments and to learn from one another.

This paper argues for the following two propositions:

1. Existing (technocratic) approaches to identifying the best strategies for achieving the MDGs are unreliable. There is an alternative approach to identifying the best strategies for achieving the MDGs, which diminishes the likelihood of costly errors and increases the likelihood of sustained success. The alternative approach establishes an institutional framework for representative decision-makers to form and revise policy recommendations, acting periodically on the basis of relevant up-to-date information from diverse sources.
2. A plausible mechanism for implementing the alternative approach is an Institutionalized Financing and Learning Mechanism (IFLM) centered on periodic peer and partner review. The IFLM enables each country to learn from its own experience and that of other countries, and thereby increases the likelihood of success.

This proposal underlines and builds upon relevant recommendations in the recent report of the United Nations Secretary General, 'In Larger Freedom: Towards Development, Security and Human Rights for All'.³

Strategic planning for the MDGs: the heart of an alternative

The limits of existing predictive models

The existing predictive models used in identifying strategies for achieving the MDGs globally are flawed as a result of their reliance on unjustified assumptions and weak data.⁴ For example, existing models assume that the unit costs of required interventions to achieve the MDGs are fixed even as the goal is progressively attained. However, there are strong *a priori* reasons to think that decreasing or increasing marginal costs (economies and diseconomies of scale) may play an important role in relation to the

MDGs. For instance, in poor countries, those to whom coverage of relevant services must be extended may be those who are most difficult to reach, for geographical or social reasons. The limited supply of skilled personnel and the impact of development assistance on the exchange rate may make it increasingly costly to extend services. On the other hand, positive externalities may lower barriers to service provision as more units of a service are provided. Transformations in social norms and transmission of relevant knowledge within social networks are likely to be among the reasons for such phenomena (see, for example, Rosenzweig and Foster, 2003).

Similarly, there may be economies or diseconomies of scope that operate between the extension of services of distinct kinds. If so, the cost of expanding services of one kind can depend on the extent to which services of another kind have already been expanded. For example, it may be less costly to bring about improvements in child health if children attend school. On the other hand, increases in child survival will increase the number of children for whom schools must be provided, and thereby increase the cost of achieving school enrolment objectives. Interactions of this kind between distinct social development objectives are plentiful.

The data required to assess the baseline scenario of the MDGs and to monitor their progress over time are at present severely deficient. As a result, it is often not possible meaningfully to judge either the extent of progress required or the costs of achieving the required level of progress. Numerous examples that support the point can be found. For instance, a recent study published in *Nature* (Snow *et al.*, 2005) found that the number of malaria cases worldwide may be close to double that previously estimated by the World Health Organization. It points out that the World Health Organization relies heavily on clinical reports of the disease for its statistics, while many sufferers do not seek treatment. Similarly, the estimates of the extent and trend of poverty across countries are highly sensitive to the assumptions that are made, and existing estimates are unreliable (see, for example, Reddy and Pogge, 2003). Apparent spatial and temporal variation in data is often not meaningful, as a result of which efforts to identify the causal sources of the apparent variation and to estimate relevant parameters (such as so-called 'poverty reduction elasticities of growth')⁵ used in assessing costs and guiding strategic choices are also not meaningful.

Even the most carefully constructed future scenarios are unlikely ultimately to prove accurate, especially when they are meant to pertain to long time horizons. The reason is that unpredicted future shocks, whether at national, regional or global levels, are sure eventually to undermine their accuracy. Such unpredicted shocks are sure, eventually, to influence the cost of achieving the goals. Examples of significant shocks of this nature that have arisen in the past or may occur in the future include new diseases (such as HIV/AIDS), disruptive large-scale climatic events (such as

the 26 December 2004 Tsunami, El Niño and global warming), and civil and regional wars. Of course, those who frame analytical models do not claim that the strategies that they recommend can be applied without regard for changes in the circumstances of their application. However, it cannot be said that these models take note of the likelihood that such changes may arise.

Any technocratic approach for identifying strategies *ex ante* is likely to suffer from problems of the kind already identified. However, the potential damage from the use of incorrect predictive models in decision-making is likely to be greater when they are applied as a guide to making decisions that have implications over long periods of time. One reason is that inaccurate predictive models can cause significant misallocation of resources and errors in policy choice. Such misallocation and error can diminish the pace with which the MDGs are attained, or make it infeasible for them to be attained at all.

The unreliability of the informational base and the undue restrictiveness of the currently most influential approaches for planning to achieve the MDGs are the source of their unreliability as guides to decision-making.

The heart of an alternative

The rationale of an alternative approach focuses on the value of learning. Its premise is that knowledge of how best to achieve the MDGs is necessarily imperfect and that beliefs about how best to achieve the MDGs ought to be updated in light of new information. Strategic choices can be made more effective by seeking out and incorporating relevant information to the maximal extent. The alternative approach incorporates this insight in two ways. First, it seeks periodically to reassess the appropriate choice of strategies in light of new information concerning conditions and recent experiences in each country. Second, it seeks to identify appropriate strategies in light of information concerning the efficacy of strategies adopted in other countries. In this way the alternative approach is likely to ensure that the pace of learning concerning the strategies most appropriate to each country is accelerated, thereby diminishing the likelihood of error and increasing the likelihood of success. The role of experts in this process is to inform decision-makers about the available facts and the implications of alternative predictive models that build upon these facts. The assignment of this role to experts is informed by the statistical theory of decision-making, which emphasizes that the intelligent synthesis of information from multiple experts who express reasonable disagreement is likely to lead to improved outcomes (see French and Insua, 2000).

The Bayesian principles of statistical decision theory underlying the alternative approach are well known. Recent literature has discussed the issues involved in great detail.⁶ In Appendix 2 we present a simple model

that illustrates the insight underlying the alternative approach. This model helps to illuminate why periodic informed revisions to strategic choices are, if not overly costly to implement, likely to increase the probability of attaining a goal and reduce its cost.

The alternative approach can be pursued in many different ways. However, we propose one particular way of doing so, which we consider to be plausible. The proposal that we make is merely one possible instantiation of the general approach, and may be taken to be helpful in 'fixing ideas'. It is not the only way of dealing with the problems inherent in the 'top-down' approach that underlies existing estimates, but it appears to us to be a promising one.

An Institutionalized Financing and Learning Mechanism for the MDGs

Rationale for an IFLM

We have argued elsewhere that the credibility of existing predictive models used in assessing alternative strategies for achieving the MDGs is undermined by a number of factors, including weaknesses in the underlying data, lack of robustness to reasonable variations in assumptions, and the likelihood that the actual costs and benefits of alternative actions will be influenced by unpredicted (although anticipatable) shocks (see Reddy and Heuty, 2005).

Is there any alternative capable of overcoming the shortcomings of the predictive models currently used to assess alternative strategies for achieving the MDGs? The impact of incorrect predictive models can be minimized by giving to such models an appropriate role in decision-making. In particular, this implies eschewing applying such predictive models over long planning horizons. Rather, an appropriate planning horizon should be chosen that reflects the limitations of current information and the prospects that better information will be available in the future.

Predictive models are an essential requirement in strategic choice (of policies and resource allocations) but the role assigned to them in decision-making must also reflect the degree of uncertainty attached to them. Accordingly, in what follows we propose an approach to achieving the MDGs that requires that predictive models guide decision-making for appropriate planning horizons, and allows policy-makers to compare and synthesize alternative models that may be available, paying explicit attention to the uncertainties that are present. The proposed approach replaces what may be regarded as a 'top-down' methodology, which is meant as a guide for decision-making over long periods of time and is based primarily on the ex-ante judgments of experts. In contrast, the proposed approach recognizes the limits of knowledge from any one source and therefore accords a greater role to consultation and collective

deliberation. The proposed approach involves the periodic reconsideration of the available evidence and possible readjustment of the proposed solutions. It is hoped that the proposed alternative can overcome some of the limitations inherent in existing approaches.

Predictive models are only one component of a comprehensive process of planning and decision-making that will help to achieve the MDGs. Accordingly, we recommend the adoption of a *comprehensive* approach to goal-oriented learning and decision-making, which we entitled the IFLM.

The purpose of the IFLM is to provide a realistic, effective and flexible approach to planning and financing, which takes note of the deep limitations of present knowledge.

The IFLM is motivated by two core empirical ideas:

- **The importance of learning:** since it cannot be known in advance how the MDGs can best be achieved, it is necessary to foster individual and collective learning on this subject.
- **The importance of flexibility:** since it cannot be known in advance what it will cost to achieve the MDGs, it is necessary periodically to reassess the best strategies to adopt.

The proposed approach is underpinned by two core normative principles, which may be taken to be implicit in the so-called 'Monterrey Consensus' on the financing of the MDGs:⁷

- **A need principle:** countries ought to have access to the resources they need to meet the MDGs.
- **A capacity principle:** countries ought to provide the resources required to meet the MDGs to the extent of their capacities.

The concepts of need and capacity applied here ought to be defined in relation to appropriate counterfactual judgments concerning whether countries (whether they may be developed or developing) are currently doing all that they reasonably can be expected to do to raise domestic resources and to deploy these resources effectively so as to promote the MDGs (respectively, abroad or at home). Specifically, a country's resource needs should be judged as those that exceed the level of resources it can reasonably be expected to raise domestically.

A developing country is deemed to need external resources to achieve the MDGs if improvements in domestic resource generation and utilization cannot reasonably suffice for this purpose. The efforts of developed countries can similarly be assessed in light of the capacity principle. We propose that the standard to be used in assessing developed countries' capacities should reflect at a *minimum* the internationally agreed objective that 0.7% of the Gross National Product (GNP) be provided as Official Development Assistance (ODA) to developing countries.

The IFLM is designed to foster individual and collective learning concerning how the MDGs may be best furthered, and to enable periodic

reassessment of countries' need for resources and (where applicable) their capacities to provide resources for the MDGs. A distinguishing feature of the IFLM is that it proposes that countries' needs and capacities be identified on a continuous (and evolving) basis.

Operation of the IFLM

It is proposed that the IFLM operate by means of a *peer and partner review mechanism*, through which each a country's efforts to achieve the MDGs are assessed by a peer and partner review committee, informed by evidence from diverse sources, and operating in a publicly transparent and broadly consultative way. A peer review committee might include representatives from north and south, from within a region and beyond it, and from among civil society representatives as well as governments. The peer and partner review mechanism is meant to provide a flexible instrument to identify each country's requirement of resources in order to achieve the MDGs, and to identify opportunities for resource generation and policy reorientation. The peer and partner review mechanism will bring about *periodic assessments* of each country's efforts toward the MDGs and their capabilities. Although assessment is periodic, the ultimate goal of attaining the MDGs is to be kept in mind by peer and partner review committees in each assessment or planning period. Strategies proposed and highlighted in each assessment or planning period should be those that are deemed to promote the ultimate goals. It is proposed that predictive models from multiple sources, reflecting alternative plausible assumptions, play a role in the peer and partner review process. Peer and partner review committees ought to possess resources with which to commission and call upon studies. Participation in the peer and partner review mechanism ought to be entirely *voluntary*, so as to reflect the importance attached by nations and societies to their sovereignty.

We propose (although this is not essential to the proposal) that countries that choose to participate may expect that *bona fide resource gaps* identified by the peer and partner review mechanism will be filled through a fast disbursing 'high-priority MDG resource channel' to be made available by international organizations and donor countries. The modalities of the 'high-priority MDG resource channel' are left open. It may operate as a part of existing mechanisms for the transfer of resources to developing countries, or separately. The MDG resource channel, if activated, will function as a supplemental incentive mechanism for developing countries to undertake peer and partner review and to seek to achieve the MDGs, as well as a means of assuring donors that resources provided meet *bona fide* resource gaps. This incentive mechanism is to be distinguished from conditionalities, which demand adherence to particular conditions in return for assistance, and often emerge against a background of duress. It is proposed that all countries, north and south,

be welcomed and encouraged to undergo peer and partner review through the IFLM.

The term 'peer and partner review' has not been rigorously defined in the international context, although it has been widely applied. According to the Organisation for Economic Co-operation and Development (OECD) it can be described as "the systematic examination and assessment of the performance of a State by other States, with the ultimate goal of helping the reviewed State improve its policy making, adopt best practices, and comply with established standards and principles" (OECD, 2002, p. 1). A peer and partner review system for the MDG would, analogously, help to assess rich and poor governments' current efforts towards the goals and systematically to identify *bona fide* resource gaps, as well as opportunities for new resource generation, reallocation of effort and policy reorientation.

The peer and partner review system proposed as a central feature of the IFLM draws its inspiration from existing experiences within the international system. The primary motive of a peer and partner review mechanism is to identify relevant facts and options in a transparent manner, and to foster exchange of information and rapid collective learning concerning effective policies and actions. The peer and partner review mechanism has historically been closely associated with the OECD (Pagani, 2002, Annex A), which has very successfully applied this method since its creation in many policy arenas. For instance, the OECD's peer review system plays a central role in the implementation of its Anti-Bribery Convention. United Nations bodies and specialized agencies also use peer review to evaluate national policies in various sectors.⁸ The European Union also applies peer review mechanisms in several areas.⁹ The European Union Employment and Social Affairs Direction has developed a peer review system for national labor market policies, which is intended to identify good policies and assess their transferability. The peer and partner review systems recently developed by the Development Assistance Committee (DAC) of the OECD for tracking the volume and characteristics of aid and private flows to developing countries, and the nascent African Peer Review Mechanism within the New Partnership for Africa's Development are similar examples. These existing initiatives may potentially be integrated with the proposed IFLM (New Partnership for Africa, 2002).

Improvements in the MDG database are essential for the success of the IFLM, as they are essential for the success of any effort to promote the MDGs. As a result, a significant investment in improving the comprehensiveness, consistency and quality of MDG-related statistics should be considered an essential complement to the creation of the IFLM.

The practical modalities of an MDG peer and partner review mechanism remain to be clarified through reflection and practical experimentation. However, as an initial basis for discussion we suggest that a workable system may be designed as follows.

Possible actors, functions and procedures of the MDG peer and partner review mechanism

The frequency of the reviews ought to be chosen in light of relevant considerations. These may include the likelihood of the emergence of new information, the likelihood of technological changes, the likelihood of economic, social and environmental shocks, and the difficulty and cost of the review process itself. Peer and partner review is a combination of the activity of the member country undergoing peer review, a Secretariat, and the peer and partner review committee (the group of examiners).

- A *Secretariat* is to be put in place by the international organization under whose authority the peer and partner review takes place. The Secretariat is expected to have a central role in supporting the review process by producing documentation and analysis as requested by the peer and partner review committee, commissioning studies as required and requested, organizing missions and meetings, maintaining the quality and the continuity of the process, and disseminating the results of the reviews to the public. External initiatives to identify alternative strategies for achieving the MDGs, and estimate their costs and benefits, are likely to provide an important analytical resource for use in periodic country reviews. Accordingly, the IFLM secretariat should have a strong cooperative relationship with such initiatives.
- *The members*: any country wishing to undergo an MDG-related peer and partner review process may do so.
- *The Peer and Partner Review Committee* (or group of examiners) should include national delegates from different countries, selected according to appropriate principles. Officials from diverse Ministries involved with the MDGs should also be represented (for instance, ministries of Finance, Economic Planning, Health, and Education). All peer group committees should include members from the south and the north in order to foster objectivity, internal and external confidence, policy dialog and cooperation. Moreover, the examiner countries should be chosen according to a rotating system in order to foster the productivity, objectivity and credibility of the process. However, the choice of committee members should centrally reflect (and give priority to) the necessity to develop a fair process based on mutual trust between the different parties involved.

A critical issue concerns the *participation of civil society representatives* in the review process. It seems desirable to offer a substantive role to civil society in the peer and partner review process (preferably through the direct participation of civil society representatives in the peer and partner review committee) so as to enhance the public credibility and impact of the system, and to encourage productive dialog between governments and civil society representatives concerning a country's MDG-related strategy. Where possible, established and mutually acceptable 'civil society' representatives from the north and the south ought to be involved in all

committees and subcommittees, and their activities should be supported by the Secretariat.

Finally the MDG peer and partner review process should follow certain *procedures* in order that the transparency, credibility and salience of its work may be ensured. Specifically, it should include the following:

- A preparatory phase consisting of background analysis and some form of self-evaluation by the country under review. The support of the Secretariat is important in this phase.
- A consultation phase during which the peer and partner review committee and the Secretariat conduct their evaluation. The MDG Report and available country analyses (developed, for instance, by the United Nations Millennium Project) represent important input that may be drawn upon in this phase.
- An assessment phase during which the final report of the peer and partner review committee will be prepared. The committee will seek consensus but, if necessary, will file a report based on a majority agreement. There will be an opportunity for dissenting members of the committee to file public comments on the majority report.
- Communication — the final report should be followed by a press release supervised by the Secretariat with a summary of the main issues and findings for the national and international media. Press events and dissemination seminars should also be organized within the country in order to publicize the results of the review. All documents associated with the review should be made publicly accessible.
- Incorporation into resource generation mechanisms — the final report should be considered by multilateral and bilateral donors. If the link between the peer and partner review process and financing is accepted then, in the case of developing countries under review, *bona fide* resource gaps identified by the peer and partner review committee will initiate fast disbursement of resources through a high-priority MDG resource channel, the modalities of which are to be established.
- Although the periodicity of this cycle is expected to be short (perhaps three or four years), the peer and partner review committee ought to be encouraged to centrally consider in each of its reviews the compatibility of a country's current actions with the long-term objectives represented by the MDGs. It should be explicitly recognized by a peer and partner review committee that the terminal conditions of a country's short-term and medium-term plan to achieve the MDGs will form the initial conditions of the next plan, and so forth, culminating in the 2015 target date.

Size, scope and coverage

In order to involve rich and poor countries symmetrically, and to help to achieve the promises of the Millennium Declaration and the Monterrey

Conference, all countries should be encouraged to adopt the peer and partner review process, on a voluntary basis.

Developing countries will have an incentive to participate in the peer and partner review process so as to prove their commitment to the MDGs, to identify policy options and lessons, and potentially to attract additional resources. The peer and partner review process will promote adherence to commitments by developed countries and thereby reduce the assurance problem in aid provision. It will also allow them to learn from their mutual experiences in regard to aid effectiveness. The Nordic countries have already conducted a review of their aid commitment under the supervision of OECD DAC. The peer and partner review process led by the OECD could be integrated within the framework of the MDG peer and partner review process. The development of a 'peer pressure' effect is likely to produce effective results and higher commitment on the part of the rich countries.

The principles, criteria and standards by which peer and partner reviews will ordinarily be conducted should be defined on a global basis, by the Secretariat in conjunction with participating countries. A set of explicit criteria and indicators that may be used as part of a fair and credible review process should be identified and agreed upon. Developing a voluntary, flexible and positive approach based on mutual trust between countries and taking into account the specificities of the national context is central to the rationale of the IFLM.

The peer and partner review should assess each country's efforts to achieve the MDGs in the light of local conditions and resource requirements. It ought to pay special heed to the need for additional resources with which to build institutional capacities and relax the constraints of countries' 'absorptive capacity'. It ought to take note of the baseline outcome information gathered in national MDG reports from diverse sources, and pay attention to relevant indicators of national effort (such as the pattern and level of public expenditures and the transparency of the administration), taking due account of a country's economic, political and social conditions. The MDG peer and partner review committee should take note of the responsiveness of a country to previous peer suggestions as part of its determination of the options available to a country when it makes its judgments concerning the existence of *bona fide* resource gaps.

Relation between the IFLM and Poverty Reduction Strategy Papers

The MDGs are development objectives that are distinct from those highlighted in so-called Poverty Reduction Strategy Papers promoted as a basis for national and international decision-making in recent years by the World Bank and the International Monetary Fund. The IFLM is potentially compatible with the Poverty Reduction Strategy Papers process only if the latter explicitly recognizes the MDGs as the objectives that it seeks to

promote. It is logically feasible to give priority *either* to the MDGs or to the macroeconomic objectives typically implicit in the Poverty Reduction Strategy Papers, but not to both. The IFLM may exist alongside the Poverty Reduction Strategy Papers in the short-term, and in the longer term supplant them. The IFLM may be applied to development objectives beyond the MDGs, as a long-term alternative to conditionality-based development finance and technical assistance.

Global assessment of aggregate needs and available resources

A global report identifying governments' MDG-related aggregate resource requirements and resource availability should be prepared periodically by the secretariat of the IFLM, on the basis of the reports of peer and partner review committees, and other sources. This global report will highlight the aggregate resource need and availability in countries undergoing peer and partner review and (to the extent feasible and appropriate) in other countries.

The global report should identify weaknesses in the statistical database for monitoring the MDGs and should prioritize specific efforts to improve the quality of data. The secretariat should make improvements in the quality of the statistical database a major concern, to which it draws donors' attention and efforts.

The global report should also provide explicit guidelines for mobilizing additional resources, pooling funds to cope with fundamental uncertainties caused by shocks and likely to affect countries' capacities to achieve the MDGs, and allocating resources more effectively both across and within sectors and countries.

The global report should identify areas in which global attention is required if progress toward the MDGs is to be made. In particular, a number of measures contributing to the provision of 'global public goods' can facilitate the achievement of the MDGs. There exist a wide variety of strategic interventions — such as efforts to develop new medical, agricultural and environmental technologies — that can have a potentially significant impact on the MDGs but that are unlikely to form a significant part of any individual country's MDG strategy. The secretariat of the IFLM should draw attention to such measures and advocate them, in conjunction with other concerned parties.

Advantages of the IFLM

The potential advantages of a peer and partner review mechanism to further the MDGs can be summarized as follows.

- The IFLM fosters:
 - **Capacity building and learning:** Peer and partner review is a mutual learning process in which sound practices and innovative

policy solutions are shared and exchanged. The process can therefore serve as an important capacity building instrument not only for the country under review, but also for countries participating in the process as committee members, and for others beyond. By encouraging context-specific problem-solving and the comparison of problem-solving approaches that have worked in different contexts, the peer and partner review mechanism will help to foster collective learning and dynamic efficiency.

- **Policy dialog and policy rationalization:** The peer and partner review provides an opportunity for countries systematically to share their perceptions of the constraints to achieving the MDGs and of requirements for achieving them (in the form of policy reforms and additional resources). Policy dialog can generate a better understanding of national specificities and facilitate appropriate and mutually compatible choices of policies. It helps to identify appropriate allocations of resources, within and across countries, and encourages countries to provide adequate financing for development.
- The IFLM incorporates operational characteristics of:
 - **Flexibility:** The short-term cycle of the IFLM will ensure that the need for resources and the ability to provide resources will be periodically reassessed, in light of new information. This does not preclude the integration of a country's immediate plans into a longer-term framework to achieve the MDGs or other development goals.
 - **Incentive compatibility:** Countries would have an incentive to participate in the IFLM, since doing so offers a means of learning about potential improvements in policies and practices, demonstrating commitment to avowed goals, and (in the case of countries that are aid recipients) gaining access to a 'high-priority' and fast-disbursing channel of resources.
- The IFLM embodies values of:
 - **Equity:** The need and capacity principles incorporated into the design of the IFLM promote the flow of resources from countries with the ability to provide them to those facing *bona fide* resource requirements.
 - **Symmetry:** All countries, north and south, are encouraged to participate in the IFLM. Although the policies and responsibilities that will be brought under scrutiny are asymmetric, the scrutiny itself is symmetric. A peer and partner review committee will typically be composed of members from both the north and south.
 - **Transparency:** The peer and partner review mechanism provides a relatively transparent system through which the efforts of countries, north and south, to achieve the MDGs or to promote developmental goals generally can be judged.

- **Voluntarism:** Participation in the IFLM is an entirely voluntary process that respects countries' sovereignty and avoids heavy-handed conditionalities.

Making the alternative work

We conclude the following:

A plausible mechanism for implementing the alternative approach is an Institutionalized Financing and Learning Mechanism (IFLM) centered on periodic peer and partner review. The IFLM enables each country to learn from its own experience and that of other countries and thereby increases the likelihood of sustained success

Existing 'top-down' approaches to identifying strategies for achieving the MDGs may lead to damaging errors, for the reasons identified earlier in this paper. An alternative that avoids such errors is necessary. The IFLM is one such alternative.

For the developed countries, the IFLM's peer and partner review mechanism will provide a basis for assessing their commitment to the MDGs both in terms of the level and quality of aid (ODA) and policy practices (fairness of trade, contribution to peace-keeping, commitment to sustainable environment). In developing countries, the peer and partner review process will identify the *bona fide* resource requirements of the countries in order to achieve the MDGs, will offer a basis for making judgments about the commitment and capacities of countries to reach the goals, and will help to identify promising policy changes.

It is expected that the IFLM will create a flexible framework that will encourage poor and rich countries to demonstrate that they are making adequate efforts to support and to achieve the MDGs. The IFLM will lead to a periodic reallocation of resources across sectors and countries in accordance with new information. The peer and partner review process will strengthen policy coordination and dialog, and create an incentive mechanism that supports the MDGs.

Peer and partner review institutionalizes a system for learning and sharing experiences that will help to integrate the MDGs into national development strategies. The application of peer and partner review in developed countries and in developing countries paves the way for more effective aid and policy coordination. It is hoped that the review process will provide an open and evolving framework for assessing the gap between the resources required to achieve the MDGs and those that are available for this purpose. It provides a framework for ensuring that the resources available are made equal to the resources required.

The IFLM is expected to encourage relevant policy reforms in the developing countries and increase commitment to the MDGs in the developed countries. The IFLM is not a system that imposes condition-

alities on developing countries as a *quid pro quo* for increased aid. On the contrary, the central principle of the IFLM is to develop a system based on partnership and mutual trust.

It is hoped that the IFLM will make countries mutually accountable. The IFLM can encourage countries — rich and poor — to reform their institutions, improve their policies and effectively apply resources. It is a mechanism for enabling countries to achieve the MDGs as well as the ultimate goals of development, which must go well beyond them.

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Notes

- 1 Each goal is associated with specific targets (18 in total) and each target is related to quantifiable indicators (48 in total). The different goals, targets and indicators are presented in Appendix 1.
- 2 See Reddy and Heuty (2005) for a comprehensive review of existing predictive models used in planning to achieve the MDGs. See also Vandemoortele and Roy (2004).
- 3 See for example United Nations (2005, p. 44, para. 175): "... the Economic and Social Council should hold annual ministerial-level assessments of progress towards agreed development goals, particularly the Millennium Development Goals. These assessments could be based on peer reviews of progress reports prepared by member States, with support from United Nations agencies and the regional commissions."
- 4 Reddy and Heuty (2005) provide detailed description of methodological problems with existing approaches to MDG needs assessments and costing.
- 5 That is, elasticities of the poverty headcount ratio with respect to per-capita income.
- 6 See, for example, Bala and Goyal (1998), French and Insua (2000), and Gale and Kariv (2002). Under appropriate conditions, it can be shown that, as the number of observations increases, a posterior distribution generated by Bayesian decision rules "converges to a point mass at the 'true' value of the parameter" (French and Insua, 2000, section 6.32).
- 7 United Nations (2000, Resolution 1, p. 1), for instance: "We the heads of State and Government (...) have resolved to address the challenges of financing for development around the world [and] we note with concern with concern current estimates of dramatic shortfalls in resources required to achieve the internationally agreed development goals, including those contained in the United Nations Millennium Declaration. (...) Mobilizing and increasing the effective use of financial resources and achieving the national and international economic conditions needed to fulfill

internationally agreed development goals (...) will be our first step in ensuring that the twenty-first century becomes the century of development for all.”

- 8 For instance, the Environmental Performance Reviews Program led by the United Nations Economic Commission for Europe or the review of investment policies of developing countries through peer review within UNCTAD (United Nations Economic and Social Council, 2003).
- 9 For a detailed discussion of the European Union’s peer-review-based “Open Method of Coordination”, see Sabel and Cohen (2001, pp. 4–5).

References

- Bala, V. and Goyal S. (1998) ‘Learning from neighbors’, *Review of Economic Studies*, 65, pp. 595–621.
- French, S. and Insua, D.R., (2000) *Statistical Decision Theory*, Oxford University Press, New York.
- Gale, D. and Kariv, S. (2002) ‘Bayesian learning in social networks’, *mimeo*, Department of Economics, New York University.
- Millennium Project (2005) *Investing in Development — A Practical Plan to Achieve the Millennium Development Goals*, Earthscan, London, Sterling.
- New Partnership for Africa (2002) *The African Peer Review Mechanism*, 10 June 2002, NEPAD, Midrand (South Africa).
- OECD (2002) *The Concept of Peer Review*, OECD Directorate for Legal Affairs, Paris.
- Pagani, F. (2002) *Peer Review: A Tool for Co-operation and Change. An Analysis of an OECD Working Method*, OECD Directorate for Legal Affairs, Paris.
- Reddy, S. and Heuty, A. (2005) ‘The cost of achieving the Millennium Development Goals: what’s wrong with existing analytical models’, *mimeo*, Department of Economics, Barnard College, Columbia University, New York.
- Reddy, S. and Pogge, T. (2003) *How Not to Count the Poor*, Columbia University, New York, [www.socialanalysis.org].
- Rosenzweig, M.R. and Foster, A.D. (1995) ‘Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture’, *Journal of Political Economy*, vol. 103, No. 6 (December 1995), pp. 1176–1209.
- Sabel, C.F. and Cohen, J. (2001) ‘Sovereignty and solidarity: EU and US’, *mimeo*, Law School, Columbia University, New York.
- Snow, R.W., Guerra, C.A., Noor, A.M., Myint, H.Y. and Hay, S.I. (2005) *Nature* doi: 10.1038/nature03342, 434, pp. 214–217.
- United Nations (2000) *United Nations Millennium Declaration*, A/RES/55/2 United Nations, New York.
- United Nations (2005) *In Larger Freedom: Towards Development, Security and Human Rights for All*, A/59/2005 United Nations, New York.
- United Nations Economic and Social Council (2003) ‘Policy dialogue: financial and other key resource mobilization issues in implementing the Millennium Development Goal of eradicating extreme poverty and hunger’, presented to the *Economic and Social Commission for Asia and the Pacific, Committee on Poverty Reduction*, Bangkok, first session, 8–10 October.
- Vandemoortele, J. and Roy, R. (2004) *Making Sense of MDG Costing*, United Nations Development Programme, Bureau for Development Policy, New York.

APPENDIX 1. The Millennium Development Goals

Goals and targets	Indicators
Goal 1: Eradicate extreme poverty and hunger	
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1. Proportion of population below \$1 per day
2. Poverty gap ratio [incidence × depth of poverty]	
3. Share of poorest quintile in national consumption	
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	4. Prevalence of underweight children (under-five years of age)
5. Proportion of population below minimum level of dietary energy consumption	
Goal 2: Achieve universal primary education	
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	6. Net enrolment ratio in primary education
7. Proportion of pupils starting grade 1 who reach grade 5	
8. Literacy rate of 15–24 year olds	
Goal 3: Promote gender equality and empower women	
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015	9. Ratio of girls to boys in primary, secondary and tertiary education
10. Ratio of literate females to males of 15–24 year olds	
11. Share of women in wage employment in the nonagricultural sector	
12. Proportion of seats held by women in national parliament	
Goal 4: Reduce child mortality	
Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	13. Under-five mortality rate
14. Infant mortality rate	
15. Proportion of 1 year old children immunized against measles	
Goal 5: Improve maternal health	
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	16. Maternal mortality ratio
17. Proportion of births attended by skilled health personnel	
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS	18. HIV prevalence among 15–24 year old pregnant women
19. Contraceptive prevalence rate	
20. Number of children orphaned by HIV/AIDS	
Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases	21. Prevalence and death rates associated with malaria

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(Continued.)

Goals and targets	Indicators
22. Proportion of population in malaria risk areas using effective malaria prevention and treatment measures	
23. Prevalence and death rates associated with tuberculosis	
24. Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)	
Goal 7: Ensure environmental sustainability*	
Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	25. Proportion of land area covered by forest
	26. Land area protected to maintain biological diversity
	27. GDP per unit of energy use (as proxy for energy efficiency)
	28. Carbon dioxide emissions (per capita) [Plus two figures of global atmospheric pollution: ozone depletion and the accumulation of global warming gases]
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water	29. Proportion of population with sustainable access to an improved water source
Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	30. Proportion of people with access to improved sanitation
	31. Proportion of people with access to secure tenure [Urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum dwellers]
Goal 8: Develop a global partnership for development*	
Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system	<i>Some of the indicators listed below will be monitored separately for the Least Developed Countries (LDCs), Africa, landlocked countries and small island developing states</i>
Includes a commitment to good governance, development, and poverty reduction — both nationally and internationally	Official Development Assistance
Target 13: Address the Special Needs of the Least Developed Countries	32. Net ODA as percentage of DAC donors' GNP [targets of 0.7% in total and 0.15% for LDCs]
Includes: tariff and quota free access for LDC exports; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction	33. Proportion of ODA to basic social services (basic education, primary health care, nutrition, safe water and sanitation)
	34. Proportion of ODA that is untied

(Continued.)

Goals and targets	Indicators
	35. Proportion of ODA for environment in small island developing states
Target 14: Address the Special Needs of landlocked countries and small island developing states (through Barbados Programme and 22nd General Assembly provisions)	36. Proportion of ODA for transport sector in land-locked countries
	Market Access
Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	37. Proportion of exports (by value and excluding arms) admitted free of duties and quotas
	38. Average tariffs and quotas on agricultural products and textiles and clothing
	39. Domestic and export agricultural subsidies in OECD countries
	40. Proportion of ODA provided to help build trade capacity
	Debt Sustainability
	41. Proportion of official bilateral HIPC debt cancelled
	42. Debt service as a percentage of exports of goods and services
	43. Proportion of ODA provided as debt relief
	44. Number of countries reaching HIPC decision and completion points
Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth	45. Unemployment rate of 15–24 year olds
Target 17: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries	46. Proportion of population with access to affordable essential drugs on a sustainable basis
Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	47. Telephone lines per 1000 people
	48. Personal computers per 1000 people

*The selection of indicators for Goals 7 and 8 is subject to further refinement.

APPENDIX 2. The simple logic of flexible planning

Consider the following decision-making scenario. There are F periods, $(0, 1, \dots, F)$. In each period, the decision-maker forms a judgment concerning the ‘technology’ that prevails at present and is likely to prevail in subsequent periods, where the technology describes the manner in which resource inputs are transformed into outcomes. It is assumed that the decision-maker observes prices in the current period and forms assumptions concerning the probability distribution of prices in subsequent periods. The assumptions regarding technology and prices give rise to an expected cost function (which states the minimum expected cost of promoting the desired objectives to a specified extent).

It is assumed that in each period of time the decision-maker chooses an *action*, x , from a space of possible actions $X \sim R^{+l}$ ($l \in N^+$) and that each action carries an associated cost, $p \cdot x$, which is defined by the price vector p prevailing at the moment that the action is taken. To fix ideas, we may think of an action as the application of some set of inputs toward a goal. It is assumed that the decision-maker is risk neutral and thus is concerned only with expected costs. We neglect discounting for simplicity. We denote the current period as period i . Suppose that the cost of processing information and formulating a plan is zero. Suppose that the actions that are undertaken are those that were planned to be undertaken in the latest plan.

Expectations concerning the prices and technology that will prevail in period j depend on the information available in period i ($i \leq j$) and may be represented by $(\{p_i^j\})$. p_i^j represents the prices that actually prevail in period j . Let x_i^j represents a set of actions that it is planned in period i to undertake in period j in order to attain the goal ($g = \underline{g}$) by the end of the planning horizon. This planned sequence of present and future actions constitutes an 'action plan'. We assume henceforth that $\{x_i^j\}$ is a set of actions which achieves the goal at least expected total cost, as evaluated on the basis of the information available in period i . Let C_i represents this least expected total cost of attaining the goal ($g = \underline{g}$) by the end of the planning horizon (i.e. period F) given the prices that are currently faced and that are expected to be faced in future periods, $\{p_i^j\}$.

We may then write:

$$E\left(C_i(g = \underline{g})\right) = \sum_{j=i}^F E\left(p_i^j \cdot x_i^j\right) = \sum_{j=i}^F p_i^j \cdot x_i^j$$

It follows from the fact that the action plan formulated in a given period is cost-minimizing that (A*):

$$\sum_{j=i2}^F p_{i2}^j \cdot x_{i1}^j \geq \sum_{j=i2}^F p_{i2}^j \cdot x_{i2}^j \text{ when } i1 \leq i2$$

In other words, the expected cost of achieving a goal is lower when the actions that are planned are those that are optimal on the basis of present information than when the actions that are planned are those that were chosen on the basis of past information, and may no longer be those which are cost minimizing.

How often should plans be modified? Suppose that successive sequential action plans are formed and executed. Consider a sequence of plans with starting point for each successive plan as follows: (0, T1, T2, ..., TN), and covering the entire interval from period zero through period F. We may describe the total costs actually incurred (given the actions that were planned and executed and the prices that actually prevailed at the time of execution of each action) by the

expression:

$$\sum_{j=0}^{T1} p_j^j \cdot x_0^j + \sum_{j=T1}^{T2} p_j^j \cdot x_{T1}^j + \dots + \sum_{j=TN}^F p_j^j \cdot x_{TN}^j$$

Applying inequality (A*) to this expression repeatedly, it is easy to arrive at the conclusion that the least cost attainable is $\sum_{j=1}^F p_j^j \cdot x_j^j$. The least cost occurs when actions are adjusted each period according to the latest (i.e. contemporaneously) available information.

We have so far supposed that the cost of processing information, formulating a plan, and revising actions is zero. Otherwise, it may no longer be optimal to adjust actions each period in accordance with the latest available information. In particular, suppose that there is a fixed cost, w , that is incurred by processing information, formulating a plan, and revising actions. In that case, this cost must be balanced against the benefits to be realized by taking advantage of new information. In particular, if an action plan leading up to some final time period, F , was formulated in period $i1 < i2$, then in order to justify the cost of assessing new information, formulating a new plan and revising previously planned actions in period $i2$ we require that:

$$\sum_{j=i2}^F p_{i2}^j \cdot x_{i1}^j - \sum_{j=i2}^F p_{i2}^j \cdot x_{i2}^j > w$$

If w is not excessively high then it will be optimal to undertake a new exercise of strategic choice in period $i2$ and revise the action plan identified in the earlier period $i1$.

The extent to which costs can be reduced through periodic revision of the choice of actions will depend on the extent to which new information regarding the optimal action plan is generated with the passage of time. This information may be revealed through increases in general understanding of the world, or through observations of the consequences of past actions undertaken by oneself or by others. Information-sharing structures (such as the IFLM) that enable agents to observe and learn from the experiences of others can increase the extent to which periodic revision of choices is desirable.

In this note, we have assumed that it is possible to attain a goal given sufficient expenditure and have focused on the impact of periodic revisions to strategic choices on the costs of attaining the goal. However, it may not always be certain that a goal can be achieved. The probability of attaining a goal, as well as the cost of achieving it will depend on the actions taken. In general, periodic informed revisions to strategic choices are, if not overly costly to implement, likely to increase the probability of attaining a goal as well as reduce its cost.

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